



POSTER PRESENTATION

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Urinary tract pathogens among inpatients at a large Italian tertiary care Hospital; a prospective monitoring study

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Background

A standardized, prospective microbiological surveillance study of urinary tract infection is ongoing at our Hospital.

Methods

The temporal trend of microbial isolates from urines of inpatients hospitalized during the last available calendar year (2008), was evaluated quarterly according to the main bacterial and fungal isolates. The same pathogens cultured more than once from the same patient within one month, have been considered only once.

Results

Of 2,327 overall episodes (as defined above), 983 (42.2%) were determined by *Escherichia coli*, followed by *Enterococcus faecalis* (443 episodes: 19.0%), *Proteus mirabilis* (156 cases: 6.7%), *Klebsiella* spp. (152 episodes: 6.5%), *Pseudomonas aeruginosa* (117 cases: 5.0%), *Enterococcus faecium* (56 episodes: 2.4%), while the first fungal pathogen was *Candida albicans* (70 episodes: 3.0%). During the proportionally short observation period, no significant variations occurred in the frequency of isolation of each mentioned urinary tract pathogen, when excluding a mild increased frequency of *Enterococcus faecium* and *Enterobacter cloacae* ($p < .07$).

Discussion

A prospective microbiological observation study significantly adds to the knowledge of local epidemiological figures and antimicrobial susceptibility pattern of hospital-associated infections, including urinary tract

infections, which are responsible for considerable morbidity among inpatients. During the still limited (one year) observation time, modest variations occurred in the frequency of isolation of the most frequent microorganisms, with *Escherichia coli* representing over 40% of cultured organisms, followed by *Enterococcus faecalis* (which proved responsible of around 19% of overall episodes). The tendency towards an increased incidence of *Enterococcus faecium* and *Enterobacter cloacae* is of concern, given the unpredictable antibiotic sensitivity profile of these last microorganisms.

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